319 SEWER/WATER PCC ACCESSORIES

319.01 DESCRIPTION

Work includes furnishing all materials, labor, tools, equipment and incidentals required to make all joints tight in the concrete, as detailed in the Drawings and as specified herein.

319.02 SUBIMITTALS

Shop drawings (specification sheets) per 105.02 shall be submitted for products including names, sources and descriptions.

Samples of materials being used shall be submitted when requested by the Engineer.

319.03 MATERIALS

Water Stops - 807.02(B)

Preformed expansion joint filler - 807.01(B)

Joint sealant - 807.02 (A)(2)

319.04 CONSTRUCTION REQUIRE MENTS

- (A) Footings, beams and slabs shall have no horizontal joints
- **(B)** Construction joints shall be placed and secured perpendicular to the face of the PCC section.
- **(C)** Defective joints and defective and improperly placed sealers and sealants shall be removed and reconstructed at Contractor expense.
 - **(D)** Water Stops:
- (1) Water stops for all joints, as indicated on the Drawings, shall be placed without bends but shall be continuous around all corners and intersections. Splices shall be made by welding per manufacturer's recommendations, subject to Engineer's approval.
- (2) Make provisions to support and protect water stops during the progress of the work. Fabricate field joints in water stops per manufacturer's printed instructions. Protect waterstop material from damage

where it protrudes from any joints.

- **(3)** A sufficient number of ties shall be placed, as directed, to insure that water stops will remain in the required position during PCC placement.
 - **(E)** Preformed Expansion Joint Filler:
- (1) Expansion joint filler shall be furnished as specified in 807.01(A). Laitance shall be removed and joint faces acceptably cleaned before placing preformed joint material.
- (2) Joint filler shall be fastened to the inside of the bulkhead form with noncorrodible fasteners to secure a mechanical bond with PCC placed on both sides of the filler. Material shall be so placed that exposed edge is within 1/8 inch for a 1/4 inch joint, in order that filler material edge can be lightly ground to provide uniform sealant depth.
 - (3) Care shall be taken at all times to prevent any disturbance of or damage to the joint filler.
 - (4) Field splices shall be made per manufacturer's recommendations for total contact fit.
 - **(F)** Joint Sealant:
- (1) Before sealing joint edges with sealant, all mortar, surface coatings, form coating, moisture, spalls, protrusions, dust, oil, grease, and frost shall be removed as approved by the Engineer by use of grinding, sandblasting, mechanical abrading, acid washing, or a combination of these methods to provide a clean, sound base for sealant adhesion. Heat shall be applied to dry out joints where required. Loose particles present or resulting from grinding, abrading or blast-cleaning shall be removed by blowing out joints with oil-free compressed air prior to application of primer or sealant. Where PCC has spalled or broken, an epoxy grout shall be used to repair the PCC to give a uniform width of joint. The epoxy shall be Engineer approved and shall be applied as directed by the manufacturer.
- **(2)** No sealant shall be placed until at least 28 days after the PCC is placed. Polyethylene bond breaker tape of correct width and length shall be placed over the joint edge.
- (3) Sealant shall be applied by experienced applicators in strict accordance with manufacturer's recommendations. Joint sealer shall be applied when the ambient temperature is between 60 degrees and 80 degrees F.
- (4) All PCC joint faces to be sealed shall be primed with a primer recommended by the sealant manufacturer. The primer shall dry for the length of time recommended by the sealant manufacturer before applying the sealant. The sealant shall be placed before the primer has dried out, so that it will provide the

proper bond. If the primer dries out, another prime coat shall be applied before placing the sealant

- **(5)** Sealant shall be installed within the time limit specified. All material not used after this time shall be discarded.
- **(6)** The application, tooling and finishing of the sealant shall be as recommended by the manufacturer. Sealant surfaces shall be smooth and even.
- (7) Adjacent surfaces shall be cleaned free of sealant or soiling as the work progresses. Use solvent or cleaning agent as recommended by the sealant manufacturer. All finish work shall be left in neat, clean condition.

319.05 MEASURE AND PAYMENT

PCC accessories will not be measured separately for payment; the cost thereof shall be included in the Contract price for PCC items of which it is a part.